

Work Order ID 141860

Thursday, February 18, 2016 10:19:27 AM

141860

10 March

Page 1

Item ID: D412-769-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Aft Facing Seat, LH

Start Date: 2/18/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 3/10/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: MCSDate: FEB 18 2016

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

IIN D412-769

Rev C

MCS 16-0224

100

Document Control

0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D412-769-041 CHG 002

SMD

MAR 07 2016

105

Pick Kit

0.00

105

Packaging

Memo

0.00

Packaging

DAS
6
9-89

FEB 24 2016

DAS
28
9-89

110

QC4- 100% Inspect kits for completeness

0.00

110

QC

Memo

0.00

Quality Control

SMD

MAR 07 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

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Thursday, February 18, 2016 10:19:27 AM

141860

Page 2

Item ID: D412-769-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Aft Facing Seat, LH

Stop ***NS2***Start Date: 2/18/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 3/10/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Packaging	0.00							
120									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-769-041								
	Location: _____								
	PPP Rev: _____								
130	QC21- Final Inspection - Work Order Release	0.00							
130									
QC	Memo	0.00							
Quality Control									

SMB
10/3/11

fg 099

MAR 03 2016

MCS

MCS

MAR 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐						
Misidentified ☐	☐	Past Due ☐							

Thursday, February 18, 2016 10:19:35 AM

141860

D412-769-041

Start Date: 2/18/2016**Required Date:** 3/10/2016**Start Qty: 1.00**

Required Qty: 1.00

Comments: IPP rev A 08-07-17 new issue DD verified by:EC IPP Rev:B
10.03.23 as per IIN revC DD verified by:EC IPP REV:C 12.07.27 @
CHG002 (ECN12-621) DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D412-724-041		Manufactured	No			110	Each	0.0000	1	1			DAS 6 9-89
D412-724-041													
Head Rest Assembly, Center													
D412-724-043		Manufactured	No			110	Each	1.0000	1	1			
D412-724-043													
Head Rest Assembly, LH													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					DAS 6 9-89
				FG017		1							
				132490		1							
D412-769-043		Manufactured	No			110	Each	0.0000	1	1			
D412-769-043													
Aft Facing Seat Assembly, LH													

DAS
6
FEB 24 9 29 AM '66

DAS
28
3-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐							
Misidentified ☐	☐	Past Due ☐	OTHER : ☐						

SmB
16/3/11

4. WEIGHT AND BALANCE

The following is the weight increase associated with the D412-769-XXX Kits. The installer is responsible for the weight of the equipment coming out of the helicopter in order to install the D412-769-XXX Aft Facing Seat kits.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-769-011	60.0 lb	0.0 in	0.00 in-lb	87.0 in	5220 in-lb
Aft Facing Seat kit	27.2 kg	0.0 m	0.00 m-kg	2.21 m	60.11 m-kg
D412-769-041	30.0 lb	-16.1 in	-483.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, LH (normal position)	13.6 kg	-0.41 m	-5.58 m-kg	2.21 m	30.06 m-kg
D412-769-042	30.0 lb	+16.1 in	+483.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, RH (normal position)	13.6 kg	+0.41 m	+5.58 m-kg	2.21 m	30.06 m-kg
D412-769-041	30.0 lb	-1.1 in	-33.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, LH (center position)	13.6 kg	-0.03 m	-0.41 m-kg	2.21 m	30.06 m-kg
D412-769-042	30.0 lb	+1.1 in	+33.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, RH (center position)	13.6 kg	+0.03 m	+0.41 m-kg	2.21 m	30.06 m-kg
D412-769-041	30.0 lb	+13.9 in	+417.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, LH (right Position)	13.6 kg	+0.35 m	+4.76 m-kg	2.21 m	30.06 m-kg
D412-769-042	30.0 lb	-13.9 in	-417.0 in-lb	87.0 in	2610 in-lb
Aft Facing Seat, RH (left Position)	13.6 kg	-0.35 m	-4.76 m-kg	2.21 m	30.06 m-kg

5. PARTS LIST

Qty -011	Qty -041	Qty -042	Part Number	Description
X			D412-769-011	AFT FACING SEAT KIT
1	X		D412-769-041	AFT FACING SEAT, LH
1		X	D412-769-042	AFT FACING SEAT, RH
			D412-769-043	AFT FACING SEAT ASSEMBLY, LH
		1	D412-769-044	AFT FACING SEAT ASSEMBLY, RH
	1	1	D412-724-041	HEAD REST ASSEMBLY, CENTER
	1		D412-724-043	HEAD REST ASSEMBLY, LH
		1	D412-724-044	HEAD REST ASSEMBLY, RH